#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023390

Address: 333 Burma Road **Date Inspected:** 03-May-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Shen Fu Yoo **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Trial Assembly

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath. Math. was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

BAY 14 Orthotropic Box Girder (OBG)

Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm for 6CW Drawing No. SEG 031F and weld Joint No. SEG031F-005 and SEG031F-006 in progress. Welder is identified as 066401. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo . The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-Tc-U4b-F.

Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm for 6CW Drawing No. SEG 031F and weld Joint No. SEG 031F -006 and SEG 031F -028 in progress. Welder is identified as 067947. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo . The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-Tc-U4b-F.

Shielded Metal Arc Welding (SMAW) Section-6BW FL3 Drawing No. SEG035A Weld Joint No. SEG035A -015 and SEG035A -016 in progress. Welder is identified as 037840 and 066038. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo . The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-TC-U4b-FCM.

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Shielded Metal Arc Welding (SMAW) Section-6BW FL3 Drawing No. SEG035A Weld Joint No. SEG035A -026 and SEG035A -027 in progress. Welder is identified as 066326 and 037996. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo . The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-TC-U4b-FCM.

Shielded Metal Arc Welding (SMAW) Section-6CW Unequal angle welding at PP44.5 Weld Joint No. 085 to 122 in progress. Welder is identified as 066422. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo. The welding variables recorded by QC appeared to comply with the WPS-B-P-2113.

Flux Cored Arc Welding (FCAW) Section-6CW Deck Panel No. DP140 Weld Joint No. DP140-001-144, 149, 151, 142 and 147 in progress. Welder is identified as 067103. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132, WPS-B-T-2133 and WPS-B-T-2233-Tc-U4b-F.

Flux Cored Arc Welding (FCAW) Section-6CW Deck Panel No. DP113 Weld Joint No. DP113-001-011, 017, 019, 009 and 013 in progress. Welder is identified as 067186. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo . The welding variables recorded by QC appeared to comply with the WPS-B-T-2132, WPS-B-T-2133 and WPS-B-T-2233-Tc-U4b-F.

Flux Cored Arc Welding (FCAW) Section-6CW Deck Panel No. DP086 Weld Joint No. DP086-001-038, 043 and 044 in progress. Welder is identified as 067103. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132, WPS-B-T-2133 and WPS-B-T-2233-Tc-U4b-F.

Flux Cored Arc Welding (FCAW) Section-7EW Deck Panel No. DP118 Weld Joint No. DP118-001-067, 056, 047, 052 and 057 in progress. Welder is identified as 069866. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132, WPS-B-T-2133 and WPS-B-T-2233-Tc-U4b-F.

Flux Cored Arc Welding (FCAW) Section-7EW Deck Panel No. DP091 Weld Joint No. DP091-001-019, 017, 007, 013, 015 and 013 in progress. Welder is identified as 066951. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132, WPS-B-T-2133 and WPS-B-T-2233-Tc-U4b-F.

Flux Cored Arc Welding (FCAW) Section-7EW Deck Panel No. DP145 Weld Joint No. DP145-001-094, 097, 099, 092 and 095 in progress. Welder is identified as 069866. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132, WPS-B-T-2133 and WPS-B-T-2233-Tc-U4b-F.

Submerged Arc Welding (SAW) Section 9AE Side Panel SP622A to SP582A Weld Joint No. SEG 050A-003 in progress. Welder is identified as 0207288. ZPMC QC is identified as Mr. Li Ming Yang and ZPMC CWI is identified as Mr. Shen Fu Yoo. The welding variables recorded by QC appeared to comply with the

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WPS-B-T-2221-B-L2C-S-2.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

| Inspected By: | Math, Manjunath | Quality Assurance Inspector |
|---------------|-----------------|-----------------------------|
| Reviewed By:  | Miller,Mark     | QA Reviewer                 |